

**NOISE CHARACTERIZATION IN A WIRELESS COMMUNICATION SYSTEM****ABSTRACT**

The character of the noise in a series of incoming symbols received over a wireless link is determined. A series of corresponding bits are recovered based upon the series of incoming symbols. The series of corresponding bits are encoded to determine a series of recovered symbols. A vector product of the series of incoming symbols and the series of recovered symbols is determined. A difference between two symbols within the vector product is determined, wherein the two symbols were transmitted over the wireless link in close temporal proximity to one another. The expected value of a non-orthogonal noise portion of the series of incoming symbols is determined based upon an expected value of the difference between the two symbols.

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